NORTH CAROLINA DEPARTMENT OF STATE TREASURER INVESTMENT ADVISORY COMMITTEE

MEETING MINUTES FOR FEBRUARY 20, 2019

Time and Location: The Investment Advisory Committee ("IAC" or the "Committee") met on Wednesday, February 20, 2019, in the Dogwood Conference Room of the Longleaf Building, 3200 Atlantic Avenue, Raleigh, North Carolina.

Members Present: The following members were present: State Treasurer Dale R. Folwell (Chair), Mike Mebane, John Aneralla, Lois Colclough, David Hartzell, and Greg Patterson.

Members Attending via Telephone: Lentz Brewer

Staff: Ben Garner, Linda Nelson, Brett Hall, Frank Lester, Craig Demko, Chris Farr, Ronald Funderburk, Renee Guerin, Sam Hayes, Casey High, Gail Kadash, Kathy O'Neill, Matthew Krimm, Fran Lawrence, Troy March, Neal Motaparthy, Tinh Phan, Loren de Mey, Christopher Morris, Meryl Murtagh, Anne Roof, Ty Powers, Jeff Smith, Rhonda Smith, Greg Taylor, Steve Toole, Joseph Farley, Jack Wilson, Deana Moore-Solomon, Michael Nichols, Brian Bolcar, Nicholas Langley and Chris Ward.

Others in Attendance: Lee Cohen – Wellington, Greg Williams – Wellington, and Suzanna Sanchez – Colombia Thread Needle, Daniel Clifton, Ulf Marxen, and Brian Bode.

AGENDA ITEM - OPENING REMARKS

The meeting was called to order at approximately 9:00 a.m.; Sam Hayes began the meeting by leading the Pledge of Allegiance.

Sam Hayes announced Michael Mebane has been chosen as Vice Chair. The Chair, Treasurer Folwell, arrived at 9:02am.

The Chair confirmed a quorum was met, then asked the Members present to declare any conflicts of interest and, there being none declared, the meeting commenced.

AGENDA ITEM – APPROVAL OF MINUTES

The Chair asked for approval of the minutes of the quarterly meeting held November 15, 2018.

Mr. Folwell moved to approve the minutes, Mr. Patterson approved the motion and Mr. Aneralla seconded, the minutes were approved.

AGENDA ITEM – PERFORMANCE UPDATE

The Chair recognized Jeff Smith, the co-interim CIO and Director of Fixed Income, and Chris Morris, the co-interim CIO and Chief Risk and Operating Officer, to present the Performance update. Mr. Smith provided a brief update on the cost-efficiencies initiative underway in the Investment Management Division (IMD). He noted the initiative has increased from \$94.5 million to an approximate annual savings of \$96.1 million over the past quarter.

Mr. Smith then provided an update on the US economic environment for the end of 2018 with a brief mention of the current quarter changes. Some of these changes mentioned include: 1) equity having the worst quarterly decline in a decade; 2) increased volatility; 3) energy stocks as some of the worst performers, 4) rates moved lower, 5) credit spreads widened, 6) non-US equities suffered declines as well, and; 7) since year-end, equities rebound, rates were steady, and spreads tightened. There is an expectation of fed being less aggressive in rates rising as implied by fed futures.

Mr. Folwell praised the IMD group for cost savings.

Mr. Smith then turned the floor to Chris Morris. Mr. Morris presented an update on assets under management, as of December 31, 2018.

Mr. Morris stated the total AUM was \$124 billion, down roughly \$7 billion from prior quarter mostly due to equity market losses. We have seen some rebound in Q1 of 2019.

Mr. Morris reviewed current NCRS asset allocation and stated an increase in underweight to growth as equities declined. The underweight to equity is 5.5%. This added value as equities fell on a relative basis. Since year end, equity underweight has decreased as equities have rallied roughly 10% since year end. Mr. Mebane asked what was being done to get growth assets back to policy targets. Mr. Morris answered that we are currently in policy range and are continually discussing it. Mr. Mebane also asked if the change in relative weight is due to market movement at this point, and at what point will we look to put money to work to bring in line. Mr. Morris answered that we will continue to look at it and stated it is hard to time the market. He also stated that we are within our ranges and are positioned conservatively.

Mr. Folwell mentioned that we pay benefits and where we pay those from help with the rebalancing. Mr. Morris reiterated Mr. Folwell's statement. Mr. Mebane asked if we are comfortable realizing losses to get back in line. Mr. Smith and Mr. Morris stated that we do not focus on realized losses but total return.

Mr. Aneralla asked if when you went below the minimum threshold, did that trigger any action? Mr. Morris stated it triggers a discussion and documentation around rebalancing and whether we suspend the recommended guideline ranges. True triggers would be breaching statutory limits, requiring action. Mr. Hartzell asked where are we in the cycle for evaluating the IPS and asset allocation? Mr. Morris answered that we will undertake that this year. We plan to review IPS at the next meeting, but not making any recommended changes at this point. Mr. Folwell discussed the employer contribution rate, going from 13% to 17%. Mr. Mebane asked how that would affect the funded ratio of the plan. Mr. Folwell explained the ratio would remain constant if we earn 7%.

Mr. Morris continued on to the Total Net Portfolio Returns vs. Benchmarks slide. Public equity was the largest detractor of return. Private equity had strong returns. He mentioned, that the 10-year point is the only period that we have beaten our 7% hurdle rate. Our most recent Asset Allocation study from 2016 predicted that the return of the plan over the next 10 years would be right around 6% annually. Our 3-year number of actual returns is right at 5.9%. We have performed within our longer-term expectations. Mr. Morris stated there will be volatile years, but on average we will expect to be around that 6%. Additionally, we significantly outperformed both the implementation and long-term policy benchmarks.

Mr. Morris moved onto the Growth of a Dollar Charts. We continue to outperform the Long-Term Policy benchmark, remarking that for 5 years alternatives significantly added value, and for 10 years alternatives

detracted value as write downs from GFC pull down alternatives at the start of the period. We expect to look better once that period rolls off.

Mr. Morris moved on to the Contribution to Total Plan Return chart. He discussed the dollar amount each asset class contributed to the earnings of the plan for the prior 1-year period. Public equity had largest contribution to negative return. The private asset classes sizably offset the negative contribution from public equity.

Mr. Morris walked the committee through the Return Attribution charts, noting the portfolio created a value add of 2.1% versus the implementation benchmark, for the 1-year time period. The strongest driver of value add was selection effect. The allocation effect was also strong but to a lesser degree. Opportunistic fixed income, equity and inflation sensitive asset classes were the greatest drivers of outperformance.

Mr. Patterson mentioned that 2% is real money, roughly \$2 billion of outperformance relative to benchmark. Mr. Morris stated there was value add over the 3-year and 5-year horizons as well. Selection effect was the driver over both periods. He also mentioned that the allocation effect detracted value on the 3-year as we were underweight equity during bull market.

Mr. Morris presented the Net of Fees Risk Metrics slide, showing values over rolling periods. The rolling volatility chart was highlighted. It was stated that realized volatility has been downward trending for quite some time and below the long-term average. There was an Incredible lack of volatility in 2017, and in 2018 volatility is exhibiting more of a return to the normal state of things.

Mr. Morris discussed tracking error and stated that it is below long-term average. Our tracking error has not increased, even though we have maintained policy weight differences.

The next topic was universe comparison. Mr. Morris mentioned that our portfolio is more conservatively positioned relative to the peer universe, so during bull markets we will underperform peers, and during declining markets we should outperform. This occurred in 2018 for the 1-year horizon. The risk is much lower than peers, typically bottom quartile. The plan typically ranks high on the Sharpe ratio given our low volatility.

Mr. Morris moved on to the Liquidity slides. He discussed the structural liquidity slide, stating that we target to have >70% of AUM in level 1 liquid assets. At this point of 72%, there are no concerns of structural liquidity. The next slide was the Liquidity Profile – funding. He mentioned the plan paid nearly \$2.7 billion in net benefit payments for the year. We expect this to increase in the future and need to ensure we maintain enough liquid assets to fund the benefit payments.

The Treasurer mentioned we will see a large increase in benefit payments in the coming years. Mr. Hartzell asked what is the cash yield on the portfolio and how does that compare to the benefit payments? Mr. Smith answered that we will gather the data and follow up with the cash yield estimates.

Next, Mr. Morris discussed the Alternatives liquidity profile, mentioning that we contributed \$3.8 billion to Alternatives, but received \$5.2 billion back. We do not expect the distributions from Alternatives to slowdown much in 2019. Mr. Hartzell asked if the distributions were largely attributable to commitments made 4-7 years ago, and Mr. Morris stated it varies by strategy but generally that timeline can be considered an accurate interpretation.

Mr. Hartzell questioned if we have forecasted out what the Real Estate cash flows will be for the future. Mr. Morris answered we run cash forecasting models for each asset class and for the total plan. Those then feed into our liquidity and asset allocation analysis.

The Treasurer said the \$1.5 billion of difference was largely attributable to one large non-core real estate distribution.

Mr. Smith discussed Asset Class Performance. He stated that, for the calendar year, private equity led the way, and public equity was the worst performer.

The next discussion was concerning new and incremental investments, and uncalled commitments. Currently the uncalled commitments sit at \$7.4 billion, which has decreased by nearly \$350 million since the last IAC meeting. Mr. Mebane asked if the unfunded commitment was much larger a few years ago. Mr. Smith showed the line chart that illustrates how it has declined and stated that we expect it to continue that trend in 2019.

Mr. Smith moved along to Asset Allocation History. He stated there has been no material change from recent years. Mr. Smith next reviewed the Top 20 Investment Managers slide. 20 managers represent 83.6% of assets. Mr. Mebane commented this chart was a fantastic representation.

Mr. Mebane asked how internal equity index is doing. Rhonda Smith mentioned we are positive for the year and are tracking the indices closely. Mr. Mebane asked if it will take 1- 1.5 years to realize cost savings? Mr. Morris affirmed.

Treasurer asked how much of assets are internally managed. The slide shows 48% of NCRS is managed internally.

Mr. Aneralla asked what is the average age of uncalled capital? Mr. Morris answered that a good chunk of that is < 5 years old. Mr. Patterson commented that a percent of that will never be called, and Mr. Morris stated that about 10-15% roughly will never be called.

Mr. Morris also mentioned that there is more concentration on higher conviction managers, and that the decrease is intentional as we look to re up with our high conviction managers.

AGENDA ITEMS - PUBLIC POLICY OUTLOOK

Treasurer Folwell introduced Dan Clifton from Strategas.

Mr. Clifton began his presentation by stating that his company, an investment strategy research firm, tries to bring clarity to politics as they affect markets. They look at public policy and overlay it on investment strategy. Washington is becoming a more important part of the investment landscape and subsequently investment decisions.

Mr. Clifton discussed the intersection of politics, the economy, and financial markets. He discussed how fiscal policy is taking over from monetary policy, the growing US economy, as well as global policy uncertainty and trade tensions.

AGENDA ITEMS – REAL ESTATE ASSEST CLASS REVIEW

After a short recess, Treasurer Folwell introduced Troy March and Tinh Phan, the asset class portfolio managers along with Jack Wilson the asset class analyst.

Mr. March began the presentation with a discussion about the Real Estate Market environment. He believes there is still room to run, especially in key segments. He also suspects growth will continue to decelerate to a more modest sustainable growth rate.

Mr. Aneralla mentioned multifamily being combined in a multi-use project rather than standalone in his hometown. He asked if we are seeing similar scenarios across the board.

Mr. March replied that there has been a substantial increase in multifamily, but it has been absorbed as single-family starts are very low. We also see rent increases occurring in multifamily, as demand is supporting the supply.

Mr. March moved on to give an overview of separate accounts in core portfolio and how well they have performed. He next discussed the difference between core and non-core strategies.

Mr. March next discussed current real estate allocation relative to targets and caps. About 63% of Real Estate is core and 37% is non-core.

Mr. Patterson asked if we are forced to sell if our market value allocation breaches the 10% statutory cap. Mr. March and Mr. Morris both responded that we are not forced to sell, but we are unable to do new commitments while we are above the 10%. Mr. Smith clarified the statute does not require forced selling.

Mr. March next discussed historical contribution / distributions in real estate. He states that contributions have decreased, distributions were much higher. We are projecting about \$1.4 billion of distributions in 2019. Most of distributions in 2018 came from non-core.

Mr. March reviewed manager concentration and the continued effort to concentrate on high conviction managers. About 83% of assets are with their high conviction managers. Additionally, 11 of the current 32 managers are high conviction. We believe these managers will outperform going forward. Manager concentration allows for more fee negotiation, transparency, and options.

Mr. Mebane asked for an explanation of contribution to return chart. Mr. March replied that high conviction managers drove most of the return. Mr. Mebane mentioned that both core and non-core are beating our 7.0 hurdle.

Mr. March next discussed the cost efficiency and the steps we have taken to decrease fees. Negotiations and portfolio aging have led to lower management fees as a percentage of market value.

Additionally, incentive fees have increased as performance has been strong. 2015 had large incentive fees, partly due to GFC funds and 2012 funds as these funds started exiting investments collecting gains and incentive payments.

Mr. Hartzell pointed out that the large distributions in 2015 align with the large incentive payments in 2015.

Mr. March reviewed Performance of the Core portfolio. He stated that core portfolio is in great shape. He mentioned that three to four years ago, they began transitioning the portfolio from 39% core to 63% core, which is appropriate as we get late in the cycle. We have increased our core portfolio more by buying core plus investments, properties that need a little more attention and build those to core. This has led to outperformance in core recently.

Next, Mr. March discussed performance of the Non-Core portfolio. This represents currently only 37% of the portfolio. We expect performance to be strong for the next few years. There is conviction in the managers, but the macro economy could be a headwind. Additionally, one realized investment in 2018 was a huge contributor to the three-year performance.

Treasurer asked if the non-core did as well as the core on a risk adjusted basis. Mr. March replied that is a hard question to answer but given that overall leverage in Non-Core is only 47% vs 40% in the Core portfolio, he felt that the 400-600BP yield premium we are achieving was a good risk adjusted return.

Mr. March continued to discuss vintage year performance and how our performance in poor vintage years stacked up well. He also mentioned that the non-core portfolio is roughly in line with the core portfolio from a leverage standpoint, and believes we are getting a good risk adjusted return from non-core. This risk is mitigated by high conviction managers.

Mr. March next reviewed unfunded commitment pacing. \$650 million of the uncalled commitment in real estate is with Blackstone. \$300 million of that we just committed.

Of the \$2.2 billion of total uncalled commitments in Real Estate, about \$850m will be called by 2021.

Mr. Hartzell asked based on the pacing, if in 2021 we may be below 8%. He questioned if this may spur new commitments in anticipation of this. The Treasurer stated we will be ready for opportunities if and when they arise.

Mr. March believes we will be at 8.75% allocation to Real Estate by the end of the year, assuming no new commitments and no major denominator effect.

Mr. March discussed the performance of the Real Estate portfolio vs public REITS.

REITS 1-year, 3-year and 5-year performance look great. The 10-year return has substantially underperformed. Ten years ago was the bottom of the REIT market. Expectations are that a year from now this will be substantially different as that period rolls off.

Mr. March discussed property type diversification. He mentioned that we are a little more overweight in office than he would like, and feels good about overweight with residential. He also mentioned underweight retail and would prefer to be even lighter. Treasurer discussed the location diversification. Cannot leave this meeting and not think about the economic impact on our portfolio, such as Amazon's new location, and other policy decisions at the state and federal levels.

AGENDA ITEMS – IAC MEMBER Q&A

IAC Members were provided with the opportunity to pose questions to the Treasurer and IMD staff. No questions were posed.

AGENDA ITEM – PUBLIC COMMENT

No public comments were made.

ADJOURNMENT

Treasurer Folwell made closing remarks thanking the staff.

The meeting was adjourned at approximately 12:03 p.m., without objection.

DALE R. FOLWELL, CPA

NORTH CAROLINA STATE TREASURER AND CHAIR